# NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE SPECIFICATIONS

## GRAZING LAND MECHANICAL TREATMENT

(Acre) Code 548

### **Guide for Contour Furrowing**

- Applicable only on moderately fine, medium and moderately coarse textured soils and limited to areas of not more than 20 percent slopes.
- Applicable on ranges having a short grass sod condition that allows accelerated runoff. For maximum benefits, there should be a climax dominant species present that has a potential (average at least one plant per square yard) for increasing in the plant community as a result of the furrowing and subsequent management.
- 3. Furrows must be constructed on the approximate contour.
- 4. Depth of furrows is to be at least six inches.
- 5. Width of furrow must be at least six inches and not more than 12 inches.
- 6. Spacing shall not exceed 1.0 foot vertical interval nor ten feet horizontal interval.
- 7. Must be done at a time when the ground is not frozen.
- Adequate rest from grazing shall be applied to ensure desired plant responses from this treatment. See practice standard 528a – Prescribed Grazing.

# Guide for Renovation by Chiseling, Disking, or Other Means

 Applicable only where range improvement can be accomplished by reducing competition and improving moisture penetration through mechanical treatment. Limited to fine, medium and moderately coarse textured soils with not more than 20 percent slopes.

- This practice will be limited to ranges where the annual production of the low producing sod forming grasses (blue grama) exceeds 50 percent by weight of the annual production and about one plant per square yard of rhizomatous species present to reoccupy the treated area.
- 3. Operation will be done on the approximate contours.
- 4. Depth of treatment generally should not exceed seven inches and should be less than four inches.
- At least 40 percent and not more than 60 percent of the existing vegetation will be destroyed.
- Will be done at a time when the ground is not frozen.
- Soil moisture should be sufficient to allow for adequate penetration and disturbance by chisel.
- Adequate rest from grazing shall be applied to ensure desired plant responses from this treatment. See practice standard 528a – Prescribed Grazing.

### **Guide for Pitting on Natural Grazing Lands**

- Limited to fine and medium textured soils with few stones in the upper part of the profile and where slopes are less than 20 percent.
- Applicable only on ranges having a short grass sod condition that allows accelerated runoff. For maximum benefits, there should be a climax dominant species with a potential (at least one plant per square yard) for increasing in the plant community as a result of the pitting, or where reseeding is planned.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resource Conservation Service.

### Specification - 548-2

- 3. Pitting will not be done when the soil is wet or frozen or when the soil is covered with snow.
- Adequate rest from grazing shall be applied to ensure desired plant responses from this treatment. See practice standard 528a – Prescribed Grazing

#### REFERENCE

Range man's Journal I (1), October 1974, "Economics of Rangeland Pitting."

Journal of Range Management, Vol. 19 (6) 1966, pp. 382-383, "Range Production Improved by Renovation and Protection."

Journal of Range Management, Vol. 27 (1) January, 1974, pp. 48-52 "Mechanical and Chemical Range Renovation in Southeastern Wyoming."

Journal of Range Management, Vol. 28, No. 4, July 1975, pp. 319-326. "Severe Mechanical and Chemical Range Renovation in Northeastern Wyoming."

Journal of Range Management, Vol. 25, September 1972, pp. 381-383, "Vegetation Changes as a Result of Soil Ripping on the Rio Puerco in New Mexico."